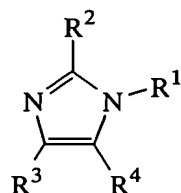


CLAIMS:

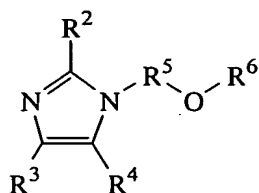
1. A resist composition comprising at least one basic compound having an imidazole skeleton and a polar functional group, represented by the general formula (1):



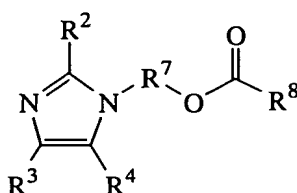
(1)

wherein R<sup>1</sup> is a straight, branched or cyclic alkyl group of 2 to 20 carbon atoms bearing at least one polar functional group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups; R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms.

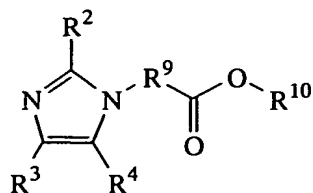
2. A resist composition comprising at least one basic compound represented by the general formulae (2) to (6):



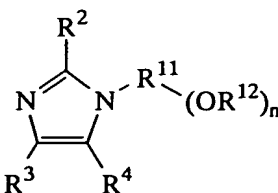
(2)



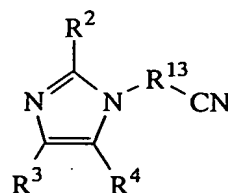
(3)



(4)



(5)



(6)

wherein  $R^2$ ,  $R^3$  and  $R^4$  are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms;

5         $R^5$ ,  $R^7$ ,  $R^9$  and  $R^{13}$  are each independently a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms;

$R^6$  and  $R^8$  are each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups;

10        $R^{10}$  is an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups;

15        $R^{11}$  is a (n+1)-valent, straight, branched or cyclic hydrocarbon group of 2 to 10 carbon atoms;

$R^{12}$  is each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups, or two of  $R^{12}$  may bond together to form a ring; and

      n is equal to 2, 3, 4 or 5.

3.       A positive-working resist composition comprising:

25       (A) the basic compound of claim 1;

      (B) an organic solvent;

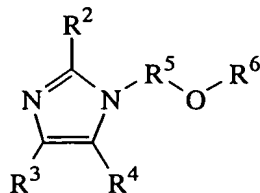
      (C) a base resin having an acid labile group-protected acidic functional group which is alkali-insoluble or substantially alkali-insoluble, but becomes alkali-soluble when the acid labile group is eliminated; and

30       (D) a photoacid generator.

4.       The positive resist composition of claim 3 which further comprises (E) a dissolution inhibitor.

5. A negative-working resist composition comprising:  
    (A) the basic compound of claim 1;  
    (B) an organic solvent;  
    (C') a base resin which is alkali-soluble, but becomes  
5 substantially alkali-insoluble when crosslinked with a  
crosslinking agent;  
    (D) a photoacid generator; and  
    (F) a crosslinking agent which induces crosslinkage  
under the action of an acid.
- 10
6. A patterning process comprising the steps of:  
    (1) applying the positive resist composition of claim  
3 onto a substrate;  
    (2) heat treating the applied resist, then exposing  
15 the heat-treated resist through a photomask to high-energy  
radiation having a wavelength of at most 300 nm or an  
electron beam; and  
    (3) heat treating the exposed resist, then developing  
the resist with a liquid developer.
- 20
7. A patterning process comprising the steps of:  
    (1) applying the negative resist composition of claim  
5 onto a substrate;  
    (2) heat treating the applied resist, then exposing  
25 the heat-treated resist through a photomask to high-energy  
radiation having a wavelength of at most 300 nm or an  
electron beam; and  
    (3) heat treating the exposed resist, then developing  
the resist with a liquid developer.

8. A basic compound represented by the general formula  
(2):



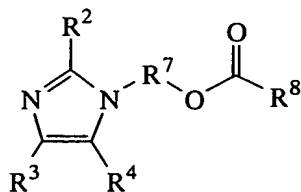
(2)

wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are each independently a hydrogen atom,  
5 a straight, branched or cyclic alkyl group of 1 to 10 carbon  
atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl  
group of 7 to 10 carbon atoms;

R<sup>5</sup> is a straight, branched or cyclic alkylene group of  
1 to 10 carbon atoms; and

10 R<sup>6</sup> is a hydrogen atom or an alkyl group of 1 to 15  
carbon atoms which may contain at least one group selected  
from among hydroxyl, carbonyl, ester, ether, sulfide,  
carbonate, cyano and acetal groups.

15 9. A basic compound represented by the general formula  
(3):



(3)

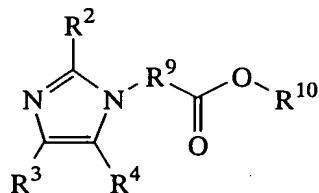
wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are each independently a hydrogen atom,  
a straight, branched or cyclic alkyl group of 1 to 10 carbon  
20 atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl  
group of 7 to 10 carbon atoms;

R<sup>7</sup> is a straight, branched or cyclic alkylene group of  
1 to 10 carbon atoms; and

25 R<sup>8</sup> is a hydrogen atom or an alkyl group of 1 to 15  
carbon atoms which may contain at least one group selected

from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups.

10. A basic compound represented by the general formula  
5 (4):



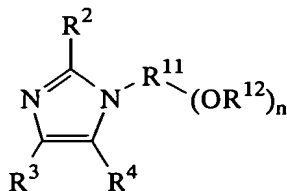
(4)

wherein  $R^2$ ,  $R^3$  and  $R^4$  are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms;

$R^9$  is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms; and

$R^{10}$  is an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups.

11. A basic compound represented by the general formula  
(5):



(5)

20

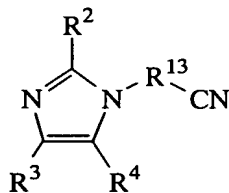
wherein  $R^2$ ,  $R^3$  and  $R^4$  are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms;

$R^{11}$  is a (n+1)-valent, straight, branched or cyclic hydrocarbon group of 2 to 10 carbon atoms;

$R^{12}$  is each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups, or two of  $R^{12}$  may bond together to form a ring; and

n is equal to 2, 3, 4 or 5.

12. A basic compound represented by the general formula (6):



(6)

wherein  $R^2$ ,  $R^3$  and  $R^4$  are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms; and

$R^{13}$  is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms.